

## **DDG 51 Program**

SURFACE NAVV





## Presented to: Surface Navy Association

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## **Agenda**



- DDG 51 Mission/Overview
- DDG 51 FY10-12 Acquisition Schedule
- Main Reduction Gear Acquisition
- DDG 113-116 Configuration Combat Systems/
   HM&E Changes
- DDG 113 Status
- DDG 51 Flight III
- Summary





#### **DDG 51 Mission**



Operate Offensively and Defensively, Independently, or as Units of Carrier Strike Groups (CSG), Expeditionary Strike Groups (ESG), and Missile Defense Action Groups in Multithreat Environments that Include Air, Surface, and Subsurface threats. Ships will Respond to Low Intensity Conflict/Coastal and Littoral Offshore Warfare (LIC/CALOW) Scenarios as Well as Open Ocean Conflict Providing and Augmenting Power Projection, Forward Presence Requirements and Escort Operations at Sea. FY10 and Follow ships will provide Ballistic Missile Defense capability.

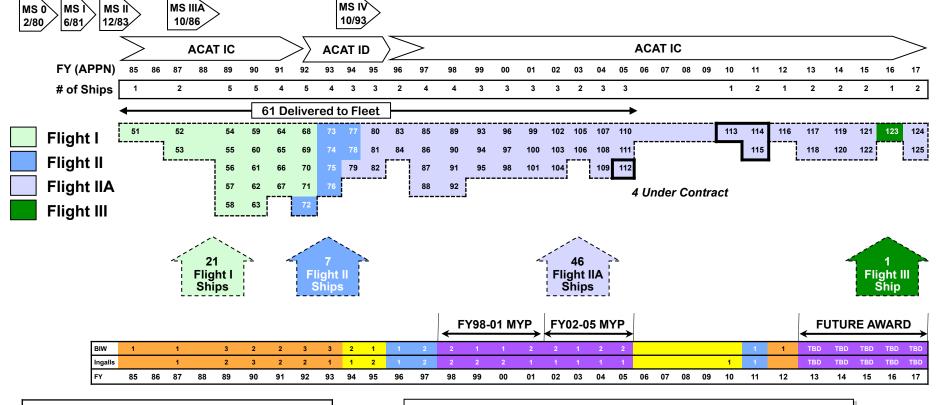
"We've made a choice – a good one in my view – that DDG 51 is the hull of choice" - U.S. Navy Undersecretary, Robert Work, Interview with Defense News, February 4, 2010





## DDG 51 Class Shipbuilding Profile (PB12) (DDG 51-125)





ACQUISITION STRATEGIES	
Competition For Work	27
Negotiated Allocation	7
Competition for Profit (PRO)	8
Multi-Year (PRO)	33
Total	75

**Nine Additional Ships Planned for FY13-FY17** 



## DDG 51 FY10-12 (DDG 113-116) Acquisition Schedule



	2008	2009	2010 J F M A M J J A S O N D	2011
CNO Orders Restart of DDG 51 Program				
DDG 51 / DDG 1000 Swap MOAs Signed				
Radar / Hull Study				
FY10/11 (DDG 113-115) AS Approved (Sole Source)				
DDG 113-115 Ship Construction RFPs Released				
DDG 113-115 Proposals Received		DDG 11	5 🛦 🛕 DDG 113/114	
DDG 113 Awarded Sole Source				
FY11/FY12 (DDG 114-116) Revised AS Approved (Pro)				
DDG114-116 Ship Construction RFPs Released				
DDG 114-116 Proposals Received				
DDG 114/115 Competitively Awarded w/ DDG 116 Option				
	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D



## Main Reduction Gear (MRG) Acquisition



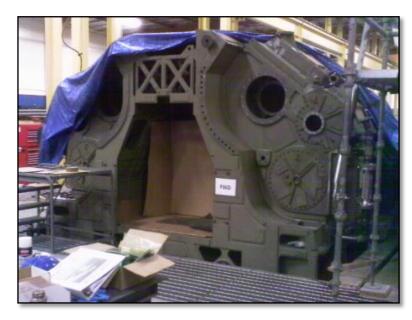
- DDG 113 and follow MRGs procured as Government Furnished Equipment (GFE) to support DDG 51 Program continuation
- DDG 113 and follow MRG Contract Strategy:
  - Full and open competition
  - Award Firm Fixed Price (FFP) Contract
  - Base contract for DDG 113 115
  - Priced options for DDGs appropriated in FY12 15
- Contract awarded 18 Jun 10 to PGC for \$80.2M / three ship sets
  - Contract generated significant savings and cost avoidance through FY15
  - Production, assembly, and testing to be performed at Santa Fe Springs, CA facility
- MRG Acquisition Management Team stood up to oversee procurement
  - Program Office, NAVSEA 05, Supervisors of Shipbuilding, DCMA and Shipbuilder members
  - On-Site Quarterly Program Reviews
  - Bi-Weekly Meetings
  - QA Audits

MRG Acquisition an Example of OSD Better Buying Power Principles in Action



## DDG 113 AF Port/Starboard MRG Manufacturing Status





DDG 113 Port Housing starting assembly



DDG 113 STBD Intermediate gear assembly

- DDG 113 MRG shipset delivery currently scheduled for Jul 12
- DDG 114 port / starboard housings scheduled complete Mar 12
- DDG 115 port / starboard housings in fabrication



# DDG 113 AF Port/Starboard MRG Manufacturing Status (con't)

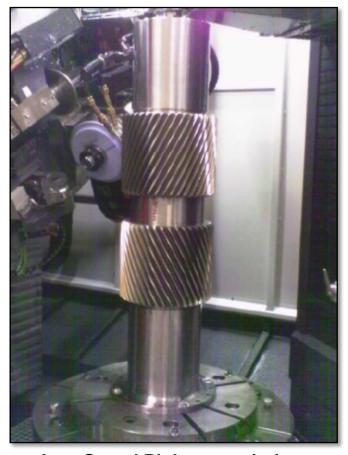




**DDG 114 STBD Housing in Milling** 



Final DDG 115 HS Gear - Post Rough Machining

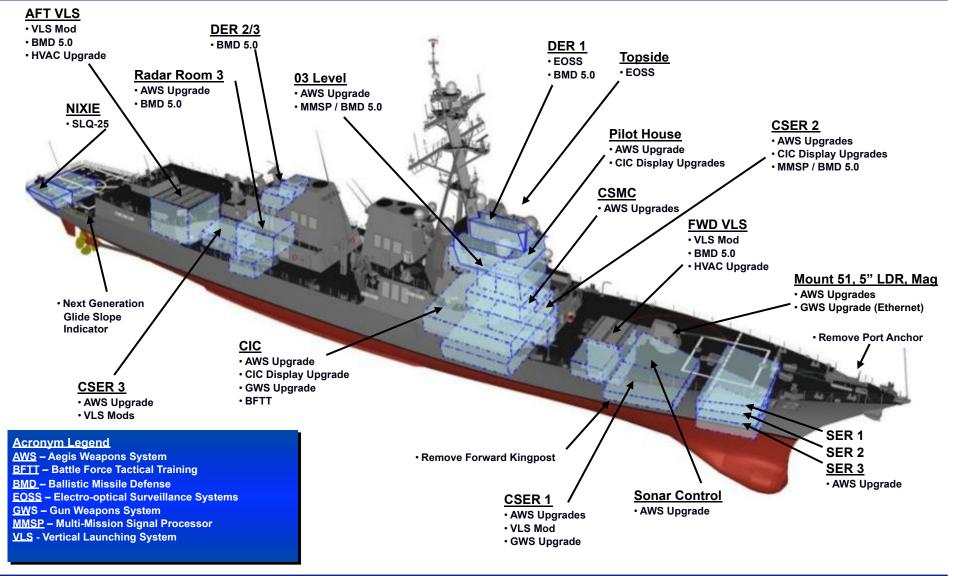


Low Speed Pinion on grinder



## DDG 113-116 Configuration Combat Systems / HM&E Changes



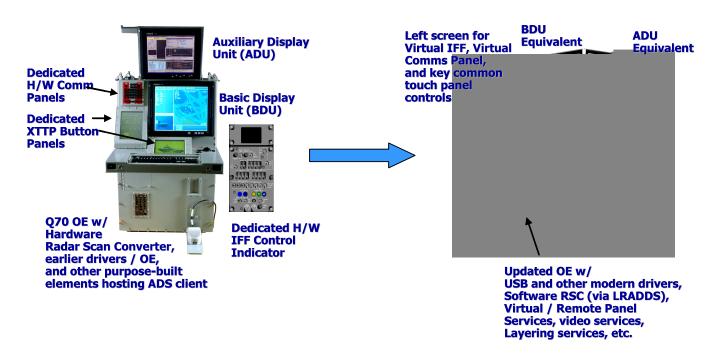




### **Common Display System (CDS)**



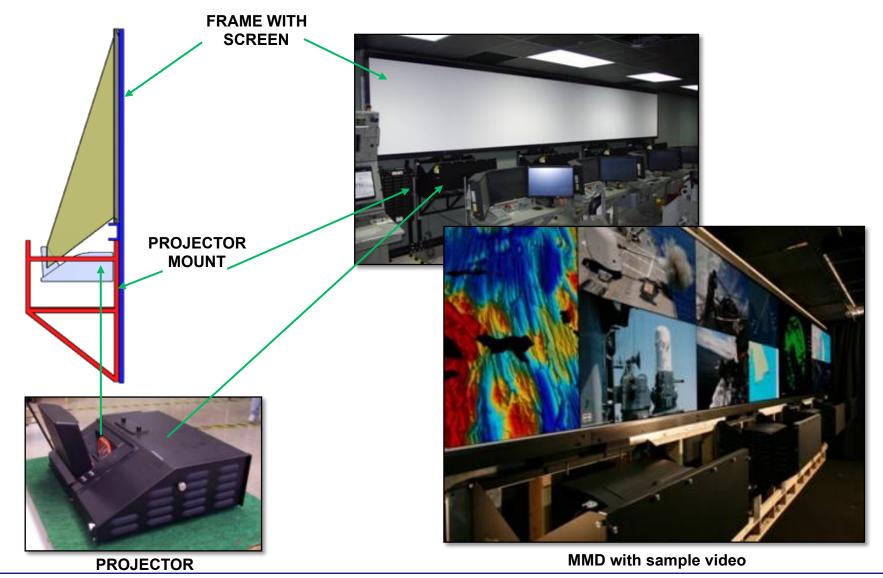
- CDS provides primary operator console to refresh Q70s
- Three screen variant chosen to support AMOD ACB12 requirements
  - Additional display area facilitates peripheral integration
  - Additional screens facilitate situational awareness
  - Better supports multi-mission operator activities
  - Common with DDG 1000





## Multi-Media Display (MMD)

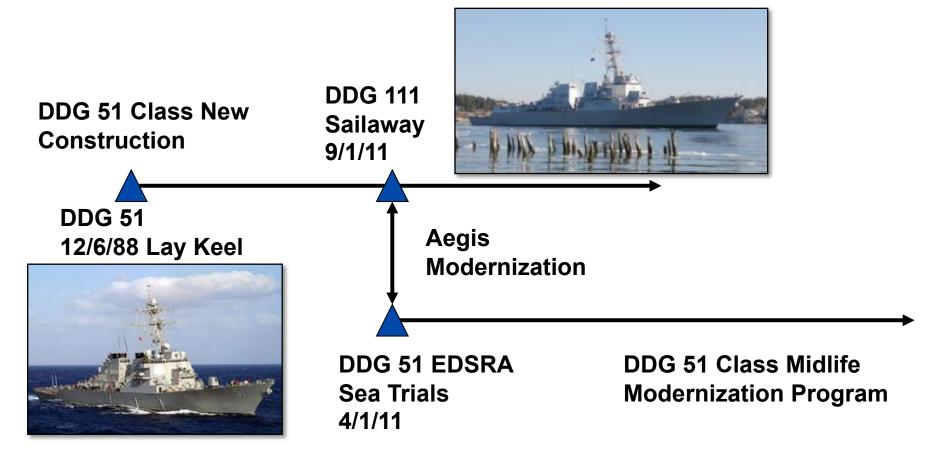






#### **DDG 51 Modernization Timeline**





Longevity of DDG 51 Class Program Enabled Common Modernization Changes



## **Integrated Bridge Navigation System**





Ship Control Console

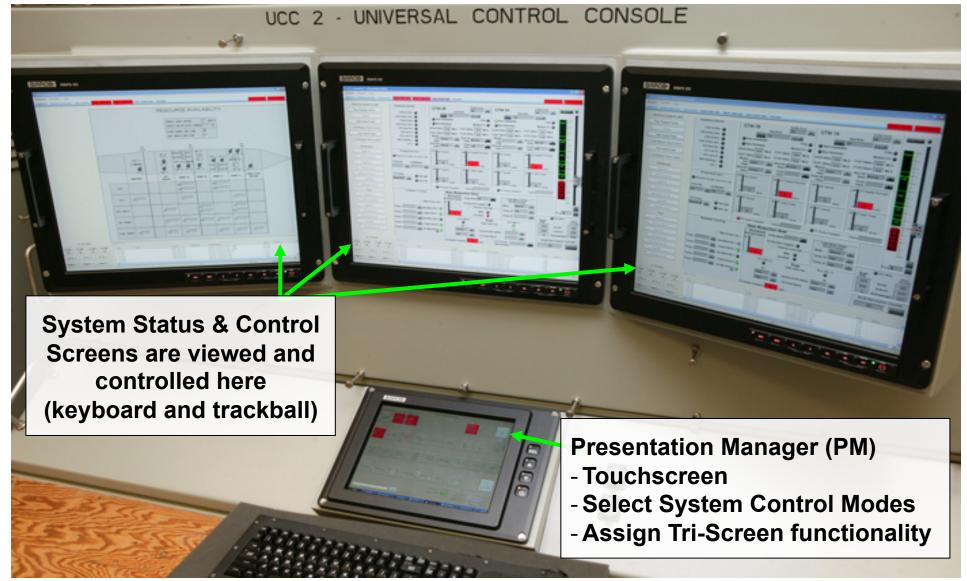
## Helm Forward Station with Training Monitor





### **Machinery Control System**







## Digital Video Surveillance System









Twenty-two distributed cameras allow operator added situational awareness



### **DDG 113 Status**



#### Accomplishments

- Sonar dome construction in process
  - 95 tons of steel cut

#### Upcoming Events

Lay Keel
 Launch
 Delivery
 29 Jul 13
 19 Sep 14
 26 Feb 16



Interior Transducer Ring Blasted and Painted



Pre Fit Up of Shell Plating



Fit Up of Deck Plating



### **DDG 51 Flight III**



- Flight III baseline being developed to integrate Air and Missile Defense Radar (AMDR) to replace AN/SPY-1D(V)
- Currently in 2<sup>nd</sup> Year of two year study
- First DDG Flight III planned in FY16





### **Summary**



- To date, 61 Ships successfully delivered to Navy on time and within budget
- DDG 113 115 on contract with option for DDG 116
- Working to procure nine additional ships (FY13 17)
- PMS 400D organization structured to meet challenges of DDG Program Restart and future Flight III upgrade
- Previously proven Acquisition Strategies will be employed to control Program Costs



## **Questions**



